ABSTRACT OF THE DISCLOSURE

A mobile communications system includes base stations and mobile units. A power control scheme is provided in which a mobile unit can enter into a discontinuous transmission (DTX) mode. During DTX mode, the mobile unit is not transmitting traffic channels that can be monitored to determine frame errors so that the target ratio of energy per bit to noise spectral density (target Eb/No) can be adjusted. Instead, the base station monitors bit errors of bits in a pilot channel communicated by the mobile unit during DTX mode. Using this technique, the target Eb/No can be adjusted even when the mobile unit is not transmitting traffic channels, so that outer-loop power control can be performed. A number of mechanisms can also be used to detect when a mobile unit has entered DTX mode.